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| 10/020,098 | 12/18/2001 | Toshiaki Tanaka | 016887-1056 | 9934 |

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EXAMINER

WU, JINGGE

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,098

Applicant(s)

TANAKA, TOSHIAKI

Examiner

Jingge Wu

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10-13,15,16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,8,10,13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) 5,6,11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment filed on June 24, 2005 has been entered and made of record.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in the specification, fig. 4B, and page 2, line 22, "moving rate" is used. However, in page 8 lines 3-7, "moving ratio" is used to describe fig. 4B. Correction or clarification is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12, 4-8, 10-13, 15-16 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant is required to clarify the subject matters "moving rate" or "moving ratio".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 4, 13, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6823084 to Myers (a reference of record) in view of JP402020186A to Suzuki et al..

As to claim 1 (as best understanding of the Examiner), Myers discloses a method of extracting text information from a moving image (video image) (abstract), comprising the steps of:

generating moving image information (video image or frames) by photographing an object to be photographed (any object contained text), which contains text (fig. 2, 210, col. 3 line 26; col. 4 lines 39-48);

extracting a still image contained in the moving image information (fig. 2, 220, col. 4 lines 51-59, note that detecting and locating text region is inherent to extract a still image from video sequence (moving image));

identifying a text region contained in the still image (fig. 2, 220, col. 4 lines 51-col. 5 line 19, note that identifying a text region is the same as identifying a rectangle region containing text); and

converting image information of the identified text region into text information (fig. 2, 250, col. 6 lines 5-19).

Myers does not explicitly mention a moving ratio not more than a predetermined value of an image contained in the moving image information.

Suzuki, in an analogous environment, teaches using a ratio (moving ratio) comparing a threshold (a prescribed level) to determine whether the image is moving image or still image (partial moving image) (abstract, note that the Examiner believes that corrected claim language should be "moving ratio").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Suzuki in the method of Myers in order to obtain still images from photographing object such as books (Suzuki, abstract).

As to claim 4, Myers further discloses a method according to claim 1, wherein the storing the extracted still image in a memory that is computer readable medium (fig. 1, 111).

As to claims 13 and 15, the claims are corresponding apparatus claims to claim 1, and 4, respectively. The discussions are addressed with regard to claims 1, and 4.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myers and Suzuki in view of US 6687420 to Matsuda et al. (a reference of record).

As to claim 2, the combination of Myers and Suzuki does not discloses the steps of checking if the object to be photographed is set on a document table; and if not, giving an alarm, otherwise photographing the object.

Matsuda, in an analogous environment, discloses the steps of:

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checking (detecting distortion) if the object to be photographed is set on a document table (col. 10 lines 48-55);

making display (issuing alarm) for prompting an operator to set the object to be photographed when the object to be photographed is not set (fig. 20a and 21a, col. 10 line 56-col. 11 line 10); and

generating the moving image information by photographing the object to be photographed, which is set on the document table (fig. 20b and 21b, col. 10 line 56-col. 11 line 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Matsuda in the method of Myers in order to obtain non-distorted image from photographing object such as books (Matsuda, col. 1 line 41-col. 2 line 13).

Claim 7, 10 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers and Suzuki, and further in view of JP2001-325401A to Sugawara.

As to claim 7, Myers discloses a method of extracting text information from a moving image (video image) (abstract), comprising the steps of:

generating moving image information (video image or frames) by photographing an object to be photographed (any object contained text), which contains text (fig. 2, 210, col. 3 line 26; col. 4 lines 39-48);

extracting a still image contained in the moving image information (fig. 2, 220, col. 4 lines 51-59, note that detecting and locating text region is inherent to extract a still image from video sequence (moving image));

identifying a text region contained in the still image (fig. 2, 220, col. 4 lines 51-col. 5 line 19, note that identifying a text region is the same as identifying a rectangle region containing text); and

converting image information of the identified text region into text information (fig. 2, 250, col. 6 lines 5-19).

Myers does not explicitly mention a moving ratio not more than a predetermined value of an image contained in the moving image information.

Suzuki, in an analogous environment, teaches using a ratio (moving ratio) comparing a threshold (a prescribed level) to determine whether the image is moving image or still image (partial moving image) (abstract, note that the Examiner believes that corrected claim language should be "moving ratio").

An analogous argument to combine Myers and Suzuki is addressed with regard to claim 1.

Moreover, Myers's system can clearly be used as a server side operation.

However, Myers does not explicitly mention photographing a book page and sending the page via communication links that is well known in the art.

Sagawara, in an analogous environment, discloses a book photographing and send the photographed book page via internet (abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Sagawara in the method of Myers in order to obtain photographed book page image and transmit it to Mayers's station to obtain clear text content (Sagawara, abstract).

As to claims 9-10, the discussions are addressed with regard to claims 3-4.

As to claim 16 and 18, the claims are corresponding apparatus claims to claim 7, 10, respectively. The discussions are addressed with regard to claims 7, 10.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myers, Suzuki, and Sagawara, and further in view of Matsuda.

As to claim 8, the discussions are addressed with regard to claim 2. An analogous argument with regard to combining Myers, Suzuki, Sagawara and Matsuda is addressed with regard to claim 2.

Allowable Subject Matter

Claims 5-6, 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and also depend on overcoming 35 USC 112 rejections.

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (571) 272-7429. He can normally be

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reached Monday through Thursday from 8:00 am to 4:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (571) 272-2600.

The Working Group Fax number is (571) 273-8300.



Jingge Wu
Primary Patent Examiner